

provisional election with traverse to prosecute the invention of Group I, viz., claims 1-8. Applicants hereby affirm this election. However, no traverse will be entered. Applicants understand that claims 9-14 are withdrawn from further consideration at this time, as being drawn to a non-elected invention.

2. The examiner has objected to the title of the present application and has required applicants to submit a proposed correction in reply, noting that formal correction will be deferred until the application has been allowed. Applicants have submitted a proposed correction for consideration by the examiner.
3. The examiner has requested that applicants insert the proper sectional headings into the specification. This has been accomplished by the present amendment.
4. The examiner has objected to the claims as being informal in a number of instances and has requested that applicants carefully reword a number of the claims "in order to make them more readable". As examples, the examiner has pointed to applicants' use of the language "as component A" and "as component B" in claim 1. Moreover, the examiner has pointed out that in claim 20, the thickness recited should be 100 μ m, not 100 mm. In reply, applicants have carefully reworded all of those claims wherein informalities were noted and have submitted the same in the instant amendment presented herewith. In so doing, applicants have followed the suggestions made by the examiner.
5. Claim 5 has been rejected under 35 USC 112, second paragraph, as being indefinite, the examiner asserting that the language "it being possible" renders

this claim indefinite and that the limitations with respect to the recited colorants are not positive limitations. By the present amendment to claim 5, this rejection has been obviated, and claim 5 is now in consonance with 35 USC 112, second paragraph.

6. Claims 8 and 19 have been rejected under 35 USC 112, second paragraph, the examiner asserting that there is not sufficient antecedent basis for "individual components" of claim 8 and "(3)" in the first line of claim 19. By the instant amendment applicants have obviated these rejections, and claims 8 and 19 are now in consonance with 35 USC 112, second paragraph.
7. Claims 1, 3-5, 7, 8, 15, 17, 18 and 20 have been rejected under 35 USC 103(a) as being unpatenable over Ellison, U.S. Re 35, 894, in view of Fischer, U.S. 5,747,568. The examiner asserts that Ellison teaches a molded article comprising a weatherable topcoat, a molded polymer substrate, and a binding layer. The examiner further asserts that although Ellison does not teach that his substrate may comprise the claimed composition, Fischer teaches a molding material comprising 30-80% of an elastomeric grafting base and 20-70% by weight of a shell grafted onto the grafting base. Fischer's grafting base comprises at least one alkyl acrylate as well as a polyfunctional crosslinking monomer, and his shell comprises styrene or substituted styrenes, and acrylonitrile or methyl methacrylate. The examiner contends that it would have been obvious to utilize the compositions of Fischer as the substrate of the

laminate taught in Ellison, because Fischer teaches that this composition can be used in such laminates.

Ellison relates to an injection molded plastic article with an integral weatherable pigmented film surface. The shaped article is composed of a weatherable cast film, which may be polymethylmethacrylate (PMMA) and a polymer substrate which may be acrylonitrile butadiene styrene (ABS). Furthermore, a bonding layer which serves as a reinforcement for the surfacing film may be present.

In contrast to Ellison, the present invention as defined in claim 1 recites a substrate layer comprising an ASA-polymer (acrylate-styrene-acrylonitrile). This substrate layer has several advantages over the film according to Ellison. See the detailed listing on page 31, line 10 to page 32, line 20 of the present application. Specific differences in the behavior of the laminated sheet or film according to the present invention in contrast to known laminated films are presented. A lower loss in toughness of the PMMA top layer is observed. Furthermore, the scratch resistance of the PMMA layer is increased by the use of an ASA substrate layer lying below the top layer. This effect could not be predicted from the teaching of the art. Furthermore, thinner PMMA top layers can be used without reducing the UV stability of the substrate layer. Ellison contains no motivation to use an ASA substrate in his laminated films or sheets

with the expectation of obtaining the surprisingly better mechanical properties as noted. Fischer discloses a thermoplastic ASA-molding material which furthermore contains α -tocopherol and a thiodipropionic ester. The last two components need not be present in the moldings according to the present invention. Fischer discloses that his molding material is suitable for the production of automotive parts. However, Fisher does not disclose or suggest that the molding materials may be used in association with laminated sheets or films. Furthermore, neither Fischer nor Ellison suggests that a specific combination of PMMA top layer and substrate could afford the advantageous properties referred to above. In particular, it could not be predicted from these references that the scratch resistance of PMMA layer is substantially increased and that the PMMA top layer shows a lower loss in toughness.

In fact, Fischer does not disclose any laminated sheet structures whatever. The instant examples show the advantageous properties of sheets made of the PMMA and ASA (component (1)). See the tables, especially table 2 on page 34, where a sheet of PMMA/ASA (component (1)) is contrasted to sheet of PMMA/ABS. Penetration energy is much higher for the sheet made of PMMA/ASA.

It is therefore submitted that the instant claims are not obvious over Ellison, in view of Fisher under 35 USC 103(a), and it is requested that

this rejection be withdrawn.

8. Claim 19 has been rejected under 35 USC 103(a) as being unpatentable over Ellison in view of Fischer as applied above, and further in view of Ogura, U.S. 5,773,139. The examiner asserts that Ogura teaches that a film may be applied to the outside of an impact resistant layer to prevent pieces thereof from scattering when such layer is impacted. The examiner contends that it would have been obvious to apply a protective film to the outside of Ellison's laminate to prevent shattering of the PMMA layer.

Applicants assert that claim 19 has all of the limitations of claim 1, and in addition has a projection film applied to the outside of the top layer of the claimed laminated sheet or film. Although Ogura discloses a transparent film applied to the outside of an impact resistant layer, he does not supply what is lacking in the combination of Ellison and Fischer as discussed immediately above. That is to say, the combined teachings of Ellison, Fischer and Ogura do not motivate one of skill in the art to make the invention defined in claim 1, as well as in claim 19. Otherwise said, since the laminated sheets or films of the present invention are nonobvious over Ellison and Fischer in view of Ogura, laminated sheets or films of the present invention which contain a protective layer are also nonobvious in view of these references.

9. Claims 2, 6 and 16 have been rejected under 35 USC 103(a) as being

unpatentable over Ellison in view of Fischer, as applied above and further in view of DeWitt, U.S. 4,107,235. The examiner asserts that it would have been obvious to the skilled artisan in view of Ellison, Fischer and DeWitt to apply a layer of impact-modified PMMA between the topcoat PMMA and the substrate, in order to increase the impact resistance of the substrate.

DeWitt relates to high impact resistant acrylic coating compositions and coated articles. This reference relates to coating compositions for high impact thermoplastic substrates which are non-embrittling. See col. 1, lines 35 to 40. The invention is especially concerned with traffic signs made of impact-modified acrylic sheets. See col. 1, lines 66 to 68. These sheets usually have a colored back side, which unfortunately reduces the strength of the impact modified acrylic substrate sheet. According to DeWitt, a coating composition is applied to the other side of the substrate which comprises an acrylic solution polymer and a compatible acrylic polymer.

In sharp contrast to DeWitt, claim 2 of the present application is directed to a laminated sheet comprising a layer of impact-modified PMMA and a top layer of PMMA. No such top layer is disclosed or suggested in DeWitt. Furthermore, the laminated sheet according to claim 2 contains no substrate layer, which is applied to the laminated sheet afterwards. Therefore the cited combination of references does not render claim 2

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obvious.

Claim 6 has been canceled, and the substrate thereof incorporated into claim 5. None of the references discloses or suggests a laminated film according to claim 5 having an interlayer comprising special-effect colorants. This claim is therefore free of the prior art.

Claim 16 is dependent upon claim 2, and is therefore patentable over the cited references of the reasons advanced above re claim 2.

Applicants therefore request that the rejection of claims 2, 5 and 16 under 35 USC 103(a) be withdrawn.

CONCLUSION

Based on the above amendment and remarks, applicants submit that this application is in condition for allowance. Early action to this end is requested.

A check for a three month extension of time (\$870.00) is attached . Should this fee be deficient, kindly charge Deposit Account No. 11-0345.

Respectfully submitted,

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